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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,357	03/23/2006	Meredith Lunn	101046.0001US	9449
34284	7590	11/04/2008		
Rutan & Tucker, LLP. 611 ANTON BLVD SUITE 1400 COSTA MESA, CA 92626			EXAMINER MAUST, TIMOTHY LEWIS	
			ART UNIT	PAPER NUMBER
			3751	
			MAIL DATE	DELIVERY MODE
			11/04/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/573,357

**Applicant(s)**

LUNN ET AL.

**Examiner**

Timothy L. Maust

**Art Unit**

3751

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 12, 13 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13 and 15-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/20/08 has been entered.

Claims 1-10, 12, 13 and 15-22 are pending.

Claims 11 and 14 are cancelled.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 12, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Brown et al.

Regarding claim 1-5 and 8 the Brown et al. reference discloses a nozzle (20), a donut shaped diaphragm valve (3) bowed in the upstream direction (see Figures 7-13) that responds by opening due to a predetermined discharge pressure and closes when the pressure ceases, and having four branches (57; see Figure 4).

In regard to claims 6 and 7, see column 7, lines 17-26.

In regard to claims 12 and 15, inasmuch structure that is defined by an installation frame, flange (4; see Figure 6) meets the claim limitation.

In regard to claim 13, see Figures 7-16 showing the valve being positioned "normal" to the spout.

In regard to claim 1, the introductory statement of intended use and all other functional statements have been carefully considered but are deemed not to impose any structural limitations on the claims distinguishable over the Brown et al. device which is further capable of dispensing fuel. Whether device was actually used in such a manner is dependent upon the performance or non-performance of a future act of use and not upon a particular structural relationship set forth in the claims.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derving in view of Brown et al..

In regard to claims 1, 5 and 13, the Derving reference discloses a nozzle (Figure 1) having a spout (1) through which a fuel (i.e., milk is a "fuel" for humans) flows from an upstream to a downstream direction, comprising: a shutoff valve (3); a diaphragm (5) positioned downstream of the shutoff valve, and having a multi-branched opening (16) to form a pressure-activated valve that seals a lumen of the spout against flow of the fuel; and wherein the diaphragm is responsive to fuel pressure in the spout (see column 3, lines 65-68).

In regard to claims 2-4, wherein the diaphragm is circumferentially coupled to the spout, is non-planar and has at least four branches (see col. 3, lines 24-36).

In regard to claims 6 and 7, wherein the diaphragm comprises a continuous piece of a polymer (see col. 3, lines 41-44).

In regard to claim 8, wherein the diaphragm is positioned such that there is substantially no dead space between the diaphragm and the end of the spout (see the positioning of diaphragm (5) and the outlet (4) in Figure 1).

Derving doesn't disclose a bowed diaphragm biased closed in the upstream direction. However, the Brown et al. reference discloses another dispenser having a nozzle (20) and a donut shaped diaphragm valve (3) bowed in the upstream direction (see Figures 7-13) that responds by opening due to a predetermined discharge pressure and closes when the pressure ceases. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the Brown et al. diaphragm for the Derving valve, wherein so doing would amount to mere substitution of one functional equivalent shut-off valve for another within the same art

and the selection of any of these shut-off valves would work equally well in the Derving device.

In regard to claims 9 and 10, the Brown reference or the Derving reference as modified by the Brown et al. reference discloses the invention substantially as claimed (discussed supra), but don't disclose the flexibility of the diaphragm to travel a certain distance or open a certain amount. It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a valve that travels a specified distance (0.25 cm or 2 cm), since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617F 2d 272, 205 USPQ 215 (CCPA 1980).

Claims 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown et al.

Regarding claims 16, 20 and 22, the Brown et al. Reference discloses the invention substantially as claimed (discussed supra), but isn't explicit as to the predetermined pressure needed to open the diaphragm valve being less than 1.5 atmospheres. It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the diaphragm valve of the Brown et al. device to open at less than 1.5 atmospheres of pressure, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617F 2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 17, see flange (4) in Figure 6.

Regarding claim 18, the diaphragm is positioned near the end of the spout as seen in the Figures.

Regarding claim 19, see branches (57) in Figure 4.

Regarding claim 21, see column 7, lines 17-26.

In regard to claim 16, the introductory statement of intended use and all other functional statements have been carefully considered but are deemed not to impose any structural limitations on the claims distinguishable over the Brown et al. device which is further capable of being used as a valve in a spout of an automotive fuel dispensing nozzle. Whether device was actually used in such a manner is dependent upon the performance or non-performance of a future act of use and not upon a particular structural relationship set forth in the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy L. Maust whose telephone number is (571) 272-4891. The examiner can normally be reached on Mon. - Thur. 7:00-5:30pm.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy L Maust/  
Primary Examiner  
Art Unit 3751

10/29/08